

D.1
6/22/93

SITE ASSESSMENT REPORT
FOR
SUPERIOR TOY SITE
U.S. EPA ID: N/A
SSID#: N/A
TDD: T05-9304-005
PAN: EIL0792SAA

US EPA RECORDS CENTER REGION 5



522102

June 28, 1993

Prepared By:

Paul W. Bury

Date:

6/28/93

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Date:

6/28/93

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John A. [Signature]

Date:

6/28/93



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

recycled paper

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1.0 SITE DESCRIPTION

The Superior Toys site is in an inactive toy production facility located at 2020 Harrison Ave. Rockford, Winnebago County, Illinois (See Figure 1 for Site Location Map). The site is a relatively flat, industrially zoned property on the north side of Harrison Avenue. West of the site is railroad tracks and east of the site is 20th Street. The area south of Harrison is residential. The site is not currently active.

2.0 SITE HISTORY

The Superior Toy site is formerly owned by Borg-Warner Automotive, Inc. (BWA). BWA manufactured universal joints from on-site 1938 to 1986 and was sold to Superior Toy and Manufacturing Company in 1988. Superior Toys produced forged plastic toys and games. The facility discontinued operation and filed an original petition for bankruptcy under Chapter XI of the Bankruptcy Code On March 27, 1990. The facility owners are currently attempting to sell the facility.

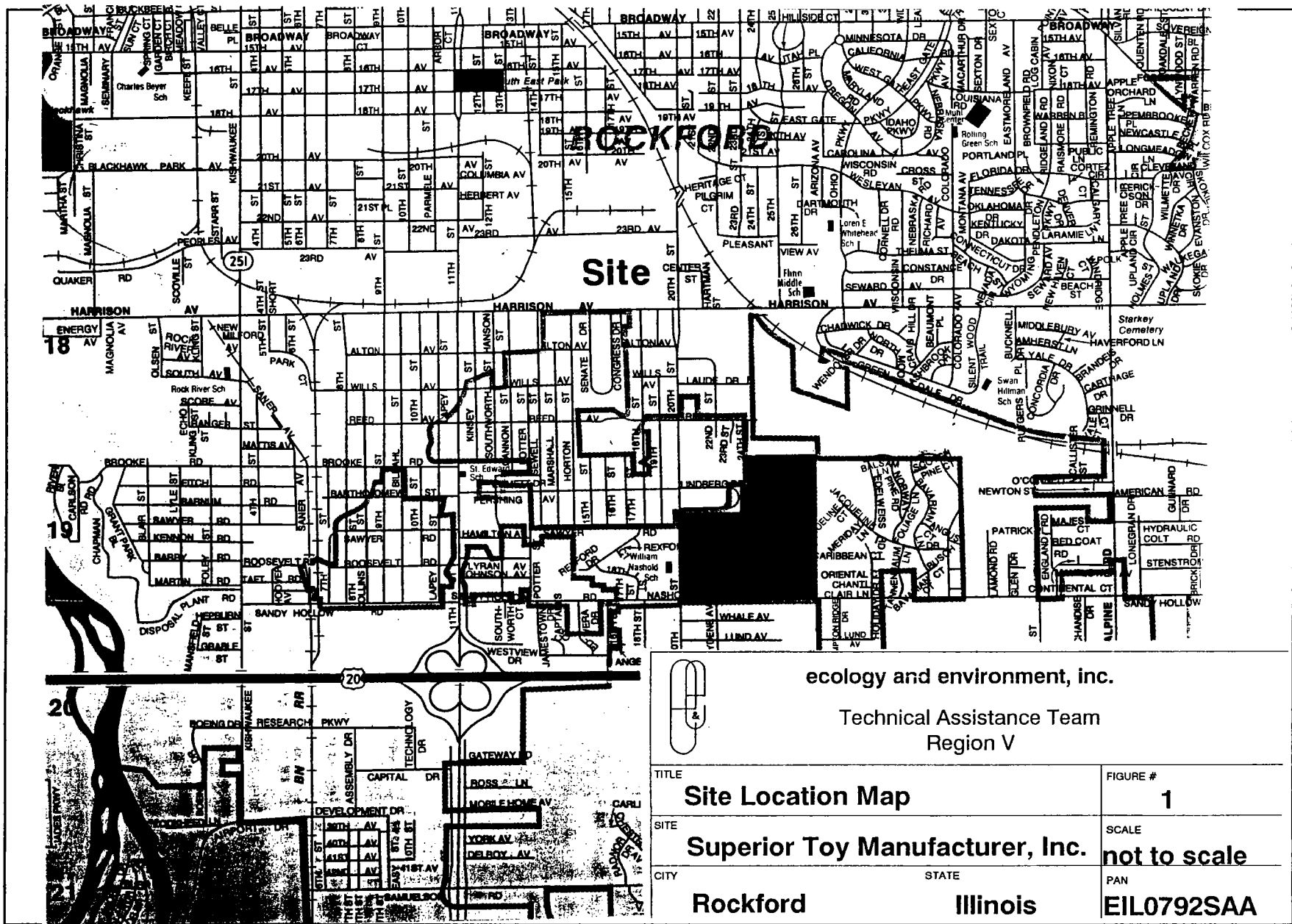
The facility is over 1.5 acres in size. A loading dock area and storage building are located north of the main building. In the facility there were over forty-one 55-gal drums of oily material. Outside the facility near the loading dock there were over thirty 55-gal drums of paint material, more than half of which were empty. The storage building contained approximately seventy 55-gal drums and over 160 small containers (See Figure 2).

3.0 SITE ACTIVITIES

On April 13, 1993, at 1000 hours, U.S. EPA On-Scene Coordinator (OSC) Len Zintak, U.S. EPA Remedial Project Manager (RPM) Karen Vendl, and Technical Assistance Team (TAT) Members Ron Bugg, Bill Sass, and Phil Korzenecki met with Illinois EPA (IEPA) representative Paul Takacs at the Ken-Rock Community Center and then proceeded to the Superior Toys site to conduct a site assessment including sampling of several drums.

At 1045 hours, after TAT had calibrated and set up monitoring equipment, a site reconnaissance was performed. The site was screened for organic vapors, LEL %, O₂ %, H₂S, pH, and CN. The OSC requested that approximately 5 drums samples be collected. A sample was collected from a drum when the pH level was greater than 12, the material in the drum had a high organic reading on the Hnu, or the drum was marked as a hazardous material.

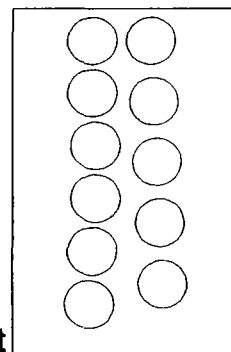
The storage building contained over sixty-seven 55-gal drums and 255 small containers (5 gal or less). During the site reconnaissance in the storage building, TAT members Bugg and Sass were in level B protection to collect drum readings with the Hnu and pH paper. TAT observed that there was a drum labelled as



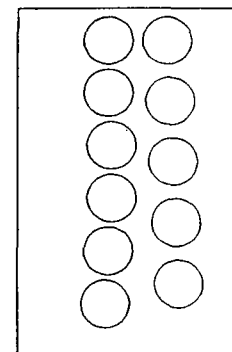
55-gal drums
 (1) non-acid liquid scaler
 (1) KOH lqd
 (1) Vanishing oil
 (1) corrosive
 (2) unknown

55 gal drums
 (4) Resin A
 (4) unknown
 (1) empty
 (3) corrosive
 (2) smaller drums of corrosive

55-gal drums
 (7) unknown
 (1) propylene glycol
 with small containers of paint, corrosive, caustics, thinner enamel, roof cement



55-gal metal drums of oily material



55-gal metal drums of oily material

Door

5-gal drums
 (121) paint Enamel

Row of Cut in half, 55-gal Drums

1-gal HNO₃ (70%)

55-gal drums
 (10) Enamel
 1-gal container
 (1) acid
 Gas cans
 1-gal (6)
 5-gal (3)

5-gal containers
 (23) paint

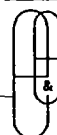
1-cubic yd box
 (40) paint cans

55-gal drum
 (1) Stripping Sol'n
 1-gal containers
 (30) paint cans w/o lids

55-gal drums
 (2) "EPTA"
 (1) Corrosive salt
 (6) Stripping Sol'n



= Rows of material



ecology and environment, Inc.

Technical Assistance Team
 Region V

TITLE Storage Building		FIGURE # 2
SITE Superior Toy Manufacturer, Inc.		SCALE not to scale
CITY Rockford	STATE Illinois	PAN EIL0792SAA

flammable liquid called vanishing oil and had Hnu readings near the bung of the 130 ppm (See Figure 3 for sample location). The sample was an oily material and was labelled DS01. The second drum of concern (DS02), a cloudy white liquid was marked as a corrosive liquid and had a pH of 14.

At 1130 hours, the reconnaissance was performed on the drums outside the facility near the loading dock. Two drums with no bung, had Hnu readings of 2000 ppm inside the drums but were empty. A drum sample (DS03) was collected from a black drum that was 2/3 full of a brown viscous material and had an Hnu reading of 250 ppm.

At 1220 hours, the group conducted the reconnaissance of the main building. During the walk-through, a total of 41, 55-gal drums were found inside the main building. Several of the drums did not have lids and were wrapped with plastic. DS04 was collected from an unmarked black drum and was full of a oily brown liquid. The Hnu reading was 180 ppm. After the sample was collected, the group located a transformer which had labels which indicated PCB oil. The transformer was not leaking and was still being used.

At 1240 hours, the group departed the main building and returned to the storage building to collect the final sample. The sample (DS05) was collected from a poly 55-gal drum. The Hnu reading was 250 ppm and the pH paper read 12. During the inventorying the storage building, several containers had acidic liquids, several drums of stripper solution, and small containers of paint and other flammable liquids (See Figure 2 for inventory listing and locations).

At 1430 hours, TAT members collected photo-documentation of the facility, storage building, loading dock area, and the sample locations. TAT began demobilization and with the permission of the OSC, TAT left the site assessment waste inside the storage building.

The OSC requested the samples be analyzed as follows: DS01 analyzed for F-listed solvents and flash point, DS02 for pH, DS03 for F-listed solvents and flash point, DS04 for F-listed solvents and flash point, and DS05 for pH, F-listed solvents, and flash point (See Table 1 for results) with QA/QC level II.

At 1450 hours, the OSC, RPM, IEPA representative, and TAT members left site. The samples were hand delivered by TAT members Bugg and Sass to Quality Analytical Laboratory in Lisle, Illinois.

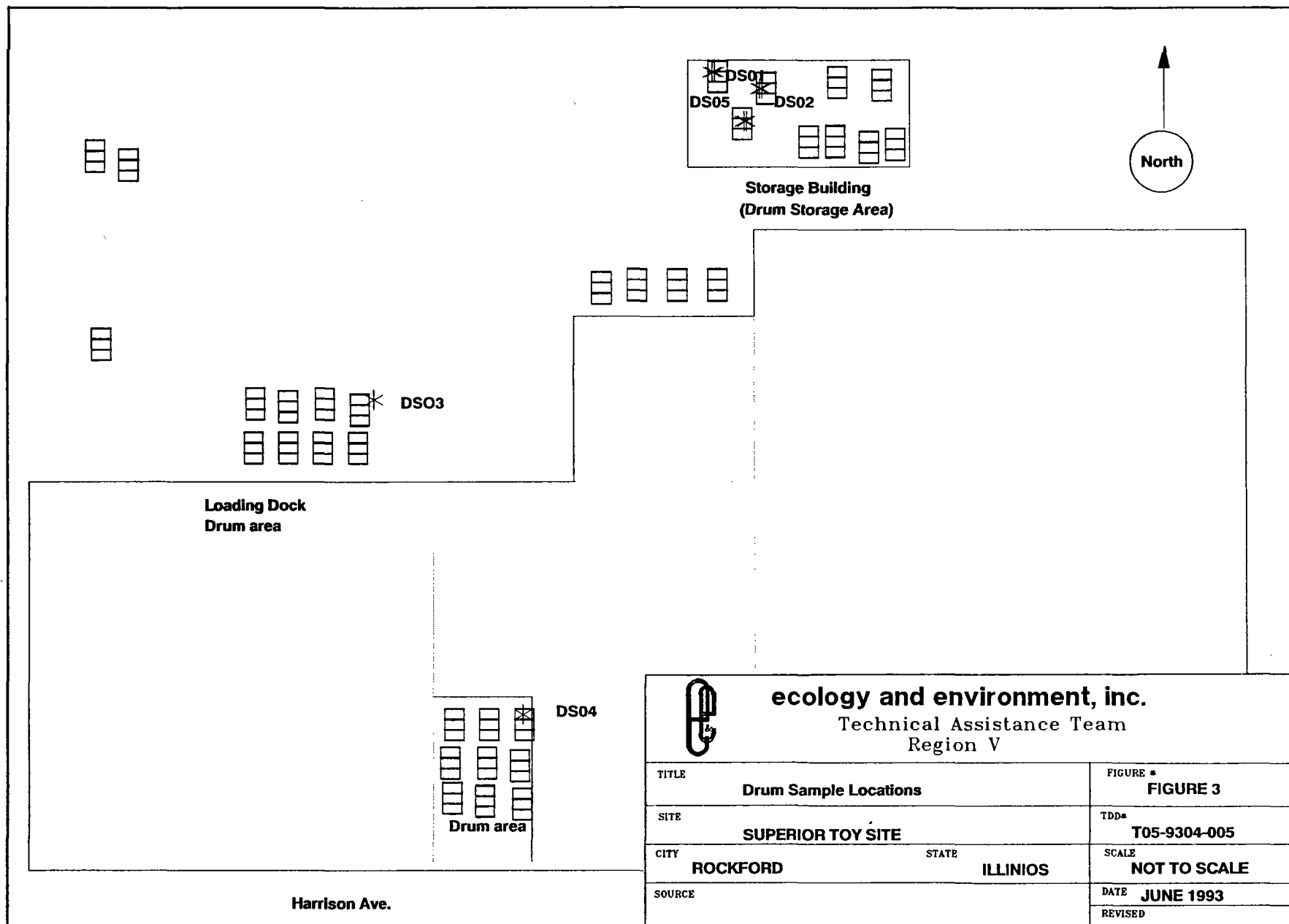
TABLE 1
SUPERIOR TOY MANUFACTURING FACILITY
2020 Harrison Ave.

SAMPLE	DS01	DS02	DS03	DS04	DS05
Flash Point	122°F	-	95°F	109°F	140°F
pH	-	13.2	-	-	12.2
Ethyl Acetate	680 mg/l	-	1800 mg/l	2200 mg/l	1100 mg/l
2- Nitropropane	ND	-	ND	240 mg/l	ND
Nitrobenzene	ND	-	ND	490 mg/l	ND
n-Butyl Alcohol	ND	-	ND	140 mg/l	ND
Pyridine	ND	-	ND	140 mg/l	2200 mg/l
1,1,1-trichloro-ethane	ND	-	ND	ND	25,000 mg/l
Xylene	ND	-	ND	5100 mg/l	ND

ND - Not Detected

DS01, DS03, and DS04 were not analyzed for pH.

DS02 was only analyzed only for pH.



4.0 ANALYTICAL RESULTS

Results of TAT collected five drum samples which revealed the presence of F-listed waste (F01, F02, F03, F4, and F05) in notable quantities. In addition, the flash points for DS01, DS03, and DS04 were below 140°F which categorizes the substance as hazardous (See Table 1 for specific quantities).

5.0 DISCUSSION OF POTENTIAL THREATS

Conditions at the Superior Toy site that may warrant a removal action, as set forth in paragraph (b) (2) of Section 300.415 of the National Contingency Plan (NCP), include:

Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances or pollutants or contaminants: Site investigations by TAT have identified high levels of F-series solvents such as 1,1,1-trichloroethane, pyridine, nitrobenzene, 2-nitropropane, ethyl acetate, and xylene existed in DS04. DS05 had high levels of ethyl acetate, pyridine, and 1,1,1-trichloroethane. DS01 and DS03 had high levels of ethyl acetate. Xylene or chemical mixtures containing xylene are deadly to humans if large enough quantities are swallowed or inhaled. Lower levels (100 - 299 ppm) of inhaled xylene can cause eye nose and throat irritation, delayed response to a visual stimulus, and poor memory. Nitrobenzene at high levels could cause methemoglobinemia (the reduction of oxygen in the blood cells). DS01, DS03, and DS04 had flash points below 140°F, and DS05 flashed at 140°F. DS02 was considered a hazardous material due to a high pH level of 13.2.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release: The drums located outside the building were in poor condition and there was no security on-site. The storage building was not secured since the sliding doors were not locked. The drums inside the storage building were in poor condition. Several drums did not have lids and were wrapped in plastic to cover the top of the drums. The drums and containers were not stored properly and the possibility of a leaks or spills due to the drums' deteriorated conditions is likely. Several floor areas inside the storage building around the drums were stained and indicated past spills.

Situations or factors that may pose threats to public health or welfare or the environment: Due to the unsecured area of the storage building, the amount of flammable liquids contained inside the building, and signs of vandalism outside the facility, the site poses a potential threat to public health or welfare or the environment.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released: The drums that were located outside the building were not properly protected from the weather conditions. Some of the drums did not have lids and their contents were exposed to the elements. The condition of the drums is decreasing due to the exposure to severe weather conditions (rusting drums).

6.0 CONCLUSION

After conducting the site assessment at Superior Toy facility located at 2020 Harrison Ave. in Rockford, Il., it was determined that the hazardous material located inside the facility, outside near the loading dock, and inside the storage building pose a threat to the environment and public health due to the poor condition of the drums and storage containers. Though the substances inside the drums sampled are considered hazardous, there is no immediate threat to the environment. If the drums are not disposed of properly, the potential of contamination to the environment increases due to the continued deterioration of the drums.

APPENDIX A
SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Superior Toys Site

PAGE 2 OF

U.S.EPA ID:

TDD: T05-9304-005

PAN: EIL0792SAA

DATE: 4/13/93

TIME: 1415

DIRECTION OF
PHOTOGRAPH:
Southwest

WEATHER
CONDITIONS:
65°F, Sunny

PHOTOGRAPHED BY:
Ron Bugg

SAMPLE ID
(if applicable):
DS03



DESCRIPTION: DS03 was collected from the white drum with the orange tag. The drum was 2/3 full with a Hnu of 250 ppm.

DATE: 4/13/93

TIME: 1415

DIRECTION OF
PHOTOGRAPH:
West

WEATHER
CONDITIONS:
65°F, Sunny

PHOTOGRAPHED BY:
Ron Bugg

SAMPLE ID
(if applicable):
DS04



DESCRIPTION: DS04 was collected inside the Superior Toy facility. The amount of drums located in the facility was approximate 41. The material was oily material and had a Hnu reading of 180 ppm.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SUPERIOR TOY SITE

PAGE 1 OF

U.S.EPA ID:

TDD: T05-9304-005

PAN: EIL0792SAA

DATE: 4/13/93

TIME: 1400

DIRECTION OF
PHOTOGRAPH:
NORTH

WEATHER
CONDITIONS:
65 F, SUNNY

PHOTOGRAPHED BY:
RON BUGG

SAMPLE ID
(if applicable):
LFT DS01, RT DS05



DESCRIPTION: The sample on the left is DS01 and the sample on the right is DS05. The Hnu readings for DS01 was 130 ppm. The

Hnu reading for DS05 was 230 to 250 ppm.

DATE: 4/13/93

TIME: 1405

DIRECTION OF
PHOTOGRAPH:
Southwest

WEATHER
CONDITIONS:
65° F, Sunny

PHOTOGRAPHED BY:
RON BUGG

SAMPLE ID
(if applicable):
DS02



DESCRIPTION: DS02 was collected inside the storage building and had a corrosive label on the poly drum.

SITE NAME: Superior Toy Site

PAGE 3 OF

U.S.EPA ID:

DATE: 4/13/93TIME: 1345DIRECTION OF
PHOTOGRAPH:
NorthWEATHER
CONDITIONS:
65 F, SunnyPHOTOGRAPHED BY:
Ron BuggSAMPLE ID
(if applicable):
N/A

DESCRIPTION: Several rows of drums located in the storage building. Several oily drums were wrap in plastic (drums in the far right corner).

DATE: 4/13/93TIME: 1410DIRECTION OF
PHOTOGRAPH:
NorthWEATHER
CONDITIONS:
65 F, SunnyPHOTOGRAPHED BY:
Ron BuggSAMPLE ID
(if applicable):

DESCRIPTION: Drum storage area, located at the northeast section of the storage building. The drums contained oily material and several drums did not have lids.

APENDIX B
ANALYTICAL DATA PACKAGE



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

Date: May 14, 1993
To: Ron Bugg, Project Manager, E & E, Chicago, IL
From: Nick Rombakis, Chemist, E & E, Chicago, IL *NR*
Thru: Phil Korzenecki, Chemist, E & E, Chicago, IL *PK*
Subj: **Data Quality Assurance Review using Generic Methods,**
Superior Toy Site, Rockford, Illinois.

Ref: Analytical TDD: T05-9304-802 Project TDD: T05-9304-005
Analytical PAN: EIL0792AAA Project PAN: EIL0792SAA

The data quality assurance review of 4 liquid samples collected from the Superior Toy site in Rockford, Illinois has been completed. Analysis for pH (EPA Method 9040) and Flash Point (EPA 1010) were performed by Quality Analytical Laboratory in Lisle, Illinois.

The samples were numbered as follows;

Laboratory Sample ID#	Sample ID#	Analysis
930575-01	DS01	Flash Point
930575-02	DS02	pH
930575-03	DS03	Flash Point
930575-04	DS04	Flash Point
930575-05	DS05	pH, Flash Point

Data Qualifications:

I. Sample Holding Time: Acceptable.

Hold times for pH and Flash Point are not specified in the Osmer Directive.

II. Calibration: Qualified.

A two point calibration for pH was performed and the measured values were within a few percent units from the ideal. Flash Point values are not supported by calibration data; therefore, the associated numerical values were flagged "J" as estimated values.

III. Blanks: Not Applicable.

IV. Error Determination: Not Applicable.

V. Overall Assessment of Data: Acceptable.

The overall usefulness of the data is based on the criteria outlined in "Quality Assurance/Quality Control Guidance for Removal Activities, Data Validation Procedures" (U.S. EPA OSWER Directive 9360.4-01 April 1990). Based on the information provided, the data are acceptable for use with the stated qualifications.

J - The associated numerical value is an estimated result because the reported concentrations were less than required detection limits or quality control criteria were not met.



ecology and environment, inc.

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International Specialists in the Environment

MEMORANDUM

Date: May 14, 1993
To: Ron Bugg, Project Manager, E & E, Chicago, IL
From: Nick Rombakis, Chemist, E & E, Chicago, IL *NR*
Thru: Phil Korzenecki, Chemist, E & E, Chicago, IL *PK*
Subj: **Volatile/Semivolatile Organic F-Listed Solvent Data Quality Assurance Review**, Superior Toy Site, Rockford, Illinois.

Ref: Analytical TDD: T05-9304-802 Project TDD: T05-9304-005
Analytical PAN: EIL0792AAA Project PAN: EIL0792SAA

The data quality assurance review of 4 liquid samples collected from the Superior Toy site in Rockford, Illinois has been completed. Analysis for F-Listed Solvents, Volatile and Semivolatile Organics (EPA Methods 8240M & 8270) was performed by Quality Analytical Laboratory in Lisle, Illinois.

The samples were numbered as follows;

Laboratory Sample ID#	Sample ID#
930575-01	DS01
930575-03	DS03
930575-04	DS04
930575-05	DS05

Data Qualifications:

I. Sample Holding Time: Acceptable.

Analysis for all samples were performed within the acceptable holding time limit of 14 days.

II. GC/MS Tuning: Acceptable.

III. Initial and Continuing Calibrations: Qualified.

A 5-point initial calibration was performed prior to VOA and Semi-VOA sample analysis. All VOA average Relative Response Factors (RRF) were greater than 0.05. The percent Relative Standard Deviations (%RSD) between the response factors of the multipoint VOA and Semi-VOA calibration compounds were less than 30% as required.

The compound methanol was missing from the initial and continuing calibration data necessitating the rejection of all reported methanol results. QA level II requires an initial and continuing calibration before a target compound is analyzed. The rejected data was flagged "R".

The percent differences between the initial and continuing calibrations exceeded the criteria of less than 25% Difference for the following compounds:

Methylene Chloride	45.18%
Trichloroethene	27.58%
MIBK	49.54%
Toluene	27.47%
1,1,2-TCA	28.01%
Ethyl Benzene	25.75%
Xylenes	29.53%
1,2-Dichlorobenzene	52.96%
Carbon Tetrachloride	29.15%

All reported data for compounds which failed to meet the continuing calibration criteria are considered estimated values and were flagged "J".

IV. Method Blanks: Acceptable.

V. Surrogate Recovery: Acceptable.

VI. Error Determination: Acceptable.

Field sample accuracy and precision were not accessed. QA level II does not require the collection of matrix spikes or field duplicates which are used to quantify system accuracy and precision per SW-846 sampling protocols.

Matrix Spike/Matrix Spike Duplicates: Not Applicable.

Field Duplicates: Not Applicable.

VII. Compound Identification: Acceptable.

XIII. Compound Quantitation and Reported Detection Limits: Acceptable.

Calculations for reported values were not verified because all parameter values were not given in the data package.

IX. Overall Assessment of Data: Acceptable.

The overall usefulness of the data is based on the criteria outlined in "Quality Assurance/Quality Control Guidance for Removal Activities, Data Validation Procedures" (U.S. EPA OSWER Directive 9360.4-01 April 1990). Based on the information provided, the data are acceptable for use with the stated qualifications.

R - The sample results are rejected (analyte may or may not be present) due to gross deficiencies in quality control criteria. Any reported value is unusable.

U - The material was analyzed for, but not detected. The associated numerical value is the sample detection limit or adjusted sample detection limit.

J - The associated numerical value is an estimated result because the reported concentrations were less than required detection limits or quality control criteria were not met.



QUALITY
ANALYTICAL
LABS, INC.

Project#: 930575
Date : 04/23/93

Ecology and Environment, Inc.
111 W. Jackson Blvd., 12th fl.
Chicago, IL 60604

ATTN: Mary Jane Ripp

Sampling Date: 04/13/93
Analyses Date: 04/14-23/93

Identification: Five samples taken by Ecology and Environment
(personnel) identified as:

ECOLOGY AND ENVIRONMENT INC.
C.O.C. No. 5-04562

Completed report with Methanol analyses as follow.

Results follow:

"Precision, Accuracy and Service"

Sample ID: 930575-01 DS01 Storage Bldg.

F-SERIES

Method: SW-846 8240 (modified to capillary), 8270 & GC/FID.

	PQL (mg/L)	Analysis (mg/L)
Acetone	2.0	ND
Benzene	0.2	ND
Carbon Tetrachloride	0.2	ND UJ
Carbon Disulfide	0.2	ND
Chlorobenzene	0.2	ND
1,2-Dichlorobenzene	0.2	ND UJ
Ethylbenzene	0.2	ND UJ
Ethyl ether	20.	ND
Isobutanol	20.	ND
Methylene Chloride	5.0	ND UJ
MEK (2-Butanone)	7.5	ND
MIBK	5.0	ND UJ
Tetrachloroethylene	1.0	ND UJ
Toluene	1.0	ND UJ
1,1,1-Trichloroethane	1.0	ND
1,1,2-Trichloroethane	1.0	ND UJ
Trichloroethylene	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	ND
Trichlorofluoromethane	1.0	ND
Xylenes	2.5	ND UJ
n-butyl Alcohol	400.	ND
Cresols/Cresylic Acid	400.	ND
Cyclohexanone	400.	ND
2-Ethoxyethanol	400.	ND
Ethyl acetate	400.	680.
Nitrobenzene	400.	ND
2-Nitropropane	400.	8000.
Pyridine	400.	ND
Methanol	10.	ND R

Method: SW846 1010

Closed-cup Flashpoint:

Analysis
122°F J

Sample ID: 930575-02 DS02 Storage Bldg.

Method: SW846 9040

pH:

Analysis
13.2

Sample ID: 930575-03 DS03 Factory-Outside

F-SERIES

Method: SW-846 8240 (modified to capillary), 8270 & GC/FID.

	PQL (mg/L)	Analysis (mg/L)
Acetone	2000.	ND
Benzene	200.	ND
Carbon Tetrachloride	200.	ND UJ
Carbon Disulfide	200.	ND
Chlorobenzene	200.	ND
1,2-Dichlorobenzene	200.	ND UJ
Ethylbenzene	200.	ND UJ
Ethyl ether	20,000.	ND
Isobutanol	20,000.	ND
Methylene Chloride	1000.	ND UJ
MEK (2-Butanone)	1500.	ND
MIBK	1000.	ND UJ
Tetrachloroethylene	200.	ND UJ
Toluene	200.	ND UJ
1,1,1-Trichloroethane	200.	ND
1,1,2-Trichloroethane	200.	ND UJ
Trichloroethylene	200.	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	200.	ND
Trichlorofluoromethane	200.	ND
Xylenes	500.	ND UJ
n-butyl Alcohol	400.	ND
Cresols/Cresylic Acid	400.	ND
Cyclohexanone	400.	ND
2-Ethoxyethanol	400.	ND
Ethyl acetate	400.	1800.
Nitrobenzene	400.	ND
2-Nitropropane	400.	ND
Pyridine	400.	ND
Methanol	10,000.	ND R

Method: SW846 1010

Closed-cup Flashpoint:

Analysis
95°F J

Sample ID: 930575-05 DS05 Storage Bldg.

F-SERIES

Method: SW-846 8240 (modified to capillary), 8270 & GC/FID.

	PQL (mg/L)	Analysis (mg/L)
Acetone	2000.	ND
Benzene	200.	ND
Carbon Tetrachloride	200.	ND VJ
Carbon Disulfide	200.	ND
Chlorobenzene	200.	ND
1,2-Dichlorobenzene	200.	ND VJ
Ethylbenzene	200.	ND VJ
Ethyl ether	20,000.	ND
Isobutanol	20,000.	ND
Methylene Chloride	1000.	ND VJ
MEK (2-Butanone)	1500.	ND
MIBK	1000.	ND VJ
Tetrachloroethylene	200.	ND VJ
Toluene	200.	ND VJ
1,1,1-Trichloroethane	200.	25000.
1,1,2-Trichloroethane	200.	ND VJ
Trichloroethylene	200.	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	200.	ND
Trichlorofluoromethane	200.	ND
Xylenes	500.	ND VJ
n-butyl Alcohol	20.	ND
Cresols/Cresylic Acid	20.	ND
Cyclohexanone	20.	ND
2-Ethoxyethanol	20.	ND
Ethyl acetate	20.	1100.
Nitrobenzene	20.	ND
2-Nitropropane	20.	ND
Pyridine	20.	2200.
Methanol	10,000.	ND R

Method: SW846 1010

Closed-cup Flashpoint:

Analysis
140°F J

Method: SW846 9040

pH:

Analysis
12.2

Sample ID: 930575-04 DS04 Factory-Inside

F-SERIES

Method: SW-846 8240 (modified to capillary), 8270 & GC/FID.

	PQL (mg/L)	Analysis (mg/L)
Acetone	2000.	ND
Benzene	200.	ND
Carbon Tetrachloride	200.	ND UJ
Carbon Disulfide	200.	ND
Chlorobenzene	200.	ND
1,2-Dichlorobenzene	200.	ND UJ
Ethylbenzene	200.	ND UJ
Ethyl ether	20,000.	ND
Isobutanol	20,000.	ND
Methylene Chloride	1000.	ND UJ
MEK (2-Butanone)	1500.	ND
MIBK	1000.	ND UJ
Tetrachloroethylene	200.	ND UJ
Toluene	200.	ND UJ
1,1,1-Trichloroethane	200.	ND
1,1,2-Trichloroethane	200.	ND UJ
Trichloroethylene	200.	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	200.	ND
Trichlorofluoromethane	200.	ND
Xylenes	500.	5100. J
n-butyl Alcohol	40.	140.
Cresols/Cresylic Acid	40.	ND
Cyclohexanone	40.	ND
2-Ethoxyethanol	40.	ND
Ethyl acetate	40.	2200.
Nitrobenzene	40.	490.
2-Nitropropane	40.	240.
Pyridine	40.	140.
Methanol	10,000.	ND R

Method: SW846 1010

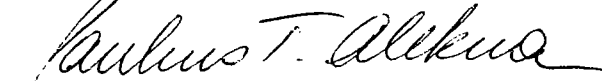
Closed-cup Flashpoint:

Analysis
109°F J

Project#: 930575
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ND = Not detected at or above the PQL
PQL = Practical Quantitation Limit

Respectfully submitted,



Paulius (Paul) T. Alekna
Lab Director
Quality Analytical Labs, Inc.

sy:EC930575

CHAIN OF CUSTODY RECORD

930575

PROJ. NO.		PROJECT NAME				NO. OF CON- TAINERS	PH P-LISTED SOLVENTS FLASH POINT						REMARKS
SAMPLERS: (Signature) <i>[Signature]</i>													
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION								
DS01	4/13			✓	STORAGE BLDG.	1		X	X				
DS02	1			✓	STORAGE BLDG.	1	X						
DS03	1			✓	FACTORY - OUTSIDE	1		X	X				
DS04	1			✓	FACTORY - INSIDE	1		X	X				
DS05	✓			✓	STORAGE BLDG.	1	X	X	X				
												QA LEVEL II	
												7-day ^{4/13} FAX 14 DAY VERBALS TO	
												M.J. RIPP, Ecology & Environment	
												312 663 1090	
												MAIL 21-DAY HARD COPY TO	
												M.J. RIPP, Ecology & Environment	
												111 W. JACKSON BLVD	
												CHICAGO IL 60604	
Relinquished by: (Signature) <i>Kymal W. Big</i>		Date / Time 4/14 1700		Received by: (Signature) <i>[Signature]</i>		Relinquished by: (Signature)		Date / Time		Received by: (Signature)			
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)			
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature) <i>Brian J. Curley</i>		Date / Time 4/14/93 8:05 AM.		Remarks QAL 1938 C UNIVERSITY LANE LISLE, IL					

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

ATTN: JEFF FATA

5- 04562